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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,736	06/20/2001	Yuichi Kawaguchi	M2047-11	5582

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EXAMINER	
GURSHMAN, GRIGORY	
ART UNIT	PAPER NUMBER
2132	

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/885,736	KAWAGUCHI ET AL.	
	Examiner	Art Unit	
	Grigory Gurshman	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/24/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 6-11, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamura (U.S. Patent No. 6.425.081 B1) in view of Nakano (U.S. Patent No. 6.421.450 B2).

3. Referring to the instant claims, Iwamura discloses an electronic watermark method, used for a network, comprising a plurality of entities, wherein provided separately are an entity for embedding an electronic watermark in encrypted data that are exchanged by said plurality of entities, and an entity for performing an encryption process and a corresponding decryption process (see abstract).

4. Referring to the independent claims 1, the limitation "a personal certificate containing the identifier; the personal certificate also containing a readable authentic image in which a digital watermark relative the identifier is embedded" is met by Figs. 1 and 2 representing image data combined with watermark and user identification (g + d1). The limitation "read means for reading the authentic image from the personal certificate" is met by an image decoding unit (see Fig. 3). Iwamura teaches comparing the hash values of the image data combined with electronic watermarks for verification (see Figs. 4, 5, 13). Iwamura

however does not explicitly teach extracting the digital watermark and comparing it against the digital watermark stored in the database. Referring to the instant claims Nakano discloses an electronic watermark system. Nakano teaches that an electronic watermark system invisibly embeds watermark information into original image data and the watermarked image data is transferred to a first medium. At the same time the embedded watermark information is transferred to a second mediums (see abstract). Nakano also teaches that a watermark extractor extracts watermark information questioned from image data stored in the medium questioned. A checker checks whether the medium questioned is authorized by comparing the extracted watermark information with the retrieved watermark information (see column 2, lines 19-29 and Fig. 2 blocks 208 and 209). The limitation " a database for storing...digital watermark information" is met by water mark data table (see unit 104 in Fig. 1).

5. Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the watermark embedding system of Iwamura by adding means for extracting the watermark and comparing means for comparing the extracted water mark with the watermark retrieved from the storage as taught by Nakano. One of ordinary skill in the art would have been motivated to modify the watermark embedding system by adding means for extracting the watermark and comparing means for comparing the extracted watermark with the watermark retrieved from the storage as taught by Nakano for checking whether the medium questioned is authorized (see Nakano, column 2, lines 24-26).

6. Referring to claims 2, 3, 9, 10 it is well known in the art to store the image having the embedded watermark in the information carrier of magnetic recoding media. For example watermarked images are stored on CDs and magnetic discs as well as on ID and credit cards.

7. Referring to claims 7 and 15, Nakano teaches communicating the watermark from watermark table (104 in Fig. 1) to embedding unit, which meets the limitations of the instant claims.

8. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamura (U.S. Patent No. 6.425.081 B1) in view of Nakano (U.S. Patent No. 6.421.450 B2) and further in view of Podilchuk (U.S. Patent No. 6.778.678 B1).

9. Referring to the instant claims, Iwamura and Nakano teach using the digital watermark for authentication of the personal certificate. However they do not explicitly teach having the element of the digital watermark randomly generated.

10. Referring to the instant claims, Podilchuk discloses high-capacity digital image watermarking based on waveform modulation of image components (see abstract). Podilchuk teaches that either a "0" bit or a "1" bit of digital watermark information is added to a given one of the N components of the image by applying the corresponding length-n random vector to the n elements of that component. Perceptual weights generated by the above-noted perceptual model may be used to determine how strong each element of the random vectors can be without significantly degrading image quality (see Detailed Description).

11. Therefore at the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the watermark embedding system of Iwamura and Nakano by having the having the element of the digital watermark randomly generated as taught in Podilchuk. One of ordinary skill in the art would have been motivated to modify the watermark embedding system by having the element of the digital watermark randomly generated as taught in Podilchuk for eliminating the possibilities of duplication of the digital watermark.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claim 16 rejected under 35 U.S.C. 102(e) as being anticipated by Iwamura (U.S. Patent No. 6.425.081 B1).

14. Referring to claim 16, Iwamura discloses an electronic watermark method, used for a network, comprising a plurality of entities, wherein provided weparately are an entity for embedding an electronic watermark in encrypted data that are exchanged by said plurality of entities, and an entity for performing an encryption process and a corresponding decryption process (see abstract).

15. Referring to the limitation, certificate comprising "a unique identifier" is met by user ID (see Fig. 2). The limitation " an authentic image of an authorized user" is met by image data *g*. The limitation "authentic image containing embedded therein digital watermark information corresponding to the identifier" is met by image data with electronic watermark (g+d1) – Fig. 1. Iwamura teaches that ID and watermark are send to the remote server, which meets the limitation " means for permitting communication of the identifier and the digital watermark ..." to the remote location. It is inherent to have an image viewable by eye.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grigory Gurshman whose telephone number is (571)272-3803. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

G.G.

GG

Grigory Gurshman
Examiner
Art Unit 2132

GILBERTO BARRÓN JR.
SUPERVISORY PATENT EXAMINER
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